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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Comp	olete if Known
Application Number	09/865,659
Filing Date	5/25/01
First Named Inventor	ANTHONY J. CALISE
Group Art Unit	2122 2121
Examiner Name	Baoker
Attorney Docket Number	3394-34267

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known **Application Number** 09/865,659 **Filing Date** 5/25/01 First Named Inventor ANTHONY J. CALISE Group Art Unit 2122 2/21 **Examiner Name** Attorney Docket Number 3394-34267

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the Examiner Cite T2 item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. ANTHONY J. CALISE, et al., Adaptive output feedback control of nonlinear systems using neural networks, Automatica, March 7, 2001, pp. 1201-1211, Automatica 37 (2001), School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, GA, USA YOUNG H. KIM, et al., A Dynamic Recurrent Neural-network-based Adaptive Observer for a Class of Nonlinear Systems, February 18, 1997, pp. 1539-1543, Automatica, Vol. 33, No. 8, The University of Texas at Arlington, Fort Worth, Texas & The University of New Mexico, Albuquerque, NM, USA Texas at Arlington, Fort Worm, 1exas & The Oniversal Services, Ser **ß**3. 44. MOSHE IDAN, et al., A Hierarchical Approach to Adaptive Control for Improved Flight Safety, Copyright 2001, pp. 1-11, American Institute of Aeronautics and Astronautics, Reston, VA Technology Center 2100 ANTHONY J. CALISE, et al., Development of a Reconfigurable Flight Control Law for the X-36 Tailless Fighter Aircraft, AIAA 2000-3940 Copyright 2000, pp. 1-9, American Institute of Aeronautics and Astronautics, Reston, VA 46. MANU SHARMA, et al., Neural Network Augmentation of Existing Linear Controllers, AIAA 2001-4163, Copyright 2001, pp. 1-9, American Institute of Aeronautics and Astronautics, Reston, VA NAIRA HOVAKIMYAN, et al. Adaptive Output Feedback Control of a Class of Nonlinear Systems Using Neural Networks, April 23, 2001, pp. 1-21, School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, GA KEN-ICHI FUNAHASHI, On the Approximate Realization of Continuous Mappings by Neural Networks, September 14, 1988, pp. 183-192, Vol. 2, Neural Networks, USA G. CYBENKO, Approximation by Superpositions of a Sigmoidal Function, Mathematics of Control, Signals, and Systems, February 17, 1989, pp. 303-315, Vol. 2, Springer-Verlag New York Inc., USA ROBERT M. SANNER, et al., Gaussian Networks for Direct Adaptive Control, November, 1992, pp. 837-863, Vol. 3, No. 6, IEEE Transactions on Neural Networks SRIDHAR SESHAGIRI, et al., Output Feedback Control of Nonlinear Systems Using RBF Neural Networks, January, 2000, pp. 69-79, Vol. II, No. 1, IEEE Transactions on Neural Network

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Examiner Signature	Kolvin Booker	Date Considered	4/15/04

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

09/865,659 **Application Number** 5/25/01 **Filing Date** ANTHONY J. CALISE **First Named Inventor** Group Art Unit **Examiner Name** Attorney Docket Number 3394-34267

Complete if Known

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
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Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)

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Filing Date	05/25/2001
First Named Inventor	CALISE, Anthony J.
Group Art Unit	2127 2121
Examiner Name	Booker
Attorney Docket Number	3394-34267

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				Application Number	09/865,659		
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STATEMENT BY APPLICANT				First Named Inventor	CALISE, Anthony J.		
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Sheet	2	of	2	Attorney Docket Number	3394-34267		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
SB	B1.	J. HORN: "Feedback-Linearization using Neural Process Models" Proceedings of the 9th International Conference on Artificial Neural Networks, Vol. 1, 7 September 1999 (1999-09-07), pages 37-42, XP001059447 UK, page 37, right-hand column, line 1 - page 38, right-hand column, line 3	
XB	B 2.	Y. ZHANG et al.: "Stable Neural Controller Design for Unknown Nonlinear Systems Using Backstepping" Proceedings of the 1999 American Control Conference, vol. 2, 2 June 1999 (1999-06-02), pages 1067-1071, XP010344848, USA, page 1067, left-hand column, line 60 - page 1068, right-hand column, line 37	
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	B4.	I. EGEMEN et al.: "Disturbance Attenuating Adaptive Controllers for Parameteric Strict Feedback Nonlinear Systems with Output Measurements" Transactions of the Asme, vol. 121, no. 1, March 1999 (1999-03), pages 48-57, XP001059617 USA, page 49, left-hand column, line 46 - page 50, left-hand column, line 57	
XB	B 5.	PODSIADLO P. et al.: "Output Feedback Adaptive Control of Non-Affine MIMO Systems" Motion Control Proceedings, 1993, Asia-Pacific Workshop on Advances in Singapore 15-16 July 1993, New York, NY, USA, IEEE, 15 July 1993 (1993-07-15), pages 159-164, XP010113424, ISBN: 0-7803-1223-6 the whole document	4
2B	₿ ^{6.}	PATENT COOPERATION TREATY, Invitation to Pay Additional Fees with Annex to Form PCT/ISA/206 Communication Relating to the Results of the Partial International Search, 15 February 2002, International Application No. PCT/US01/17201, filed 25 May 2001 by applicant Georgia Tech Research Corporation	
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Examiner Signature Kalun Becker	Date Considered	4/15/04

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Complete if Known Substitute for form 1449B/PTO 09/865.659 Application Number INFORMATION DISCLOSURE 5/25/2001 CALISE, Anthony J. Filing Date First Named Inventor STATEMENT BY APPLICANT Group Art Unit (use as many sheets as necessary)

2 of Z **Examiner Name** Backer of Attorney Docket Number 3304-34267 Sheet

le name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the em (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) nublisher city and/or county where published ten Opinion, PCT/US01/17201 (PCT application related to present application) O mailed July 19, 2002. mational Search Report, PCT/US01/17201 (PCT application related to present on), ISA/EPO Authorized Officer: Mustafa Corapci, mailed July 18, 2002. Basar, "Disturbance Attenuating Adaptive Controllers for Parametric Strict Feedback or Systems with Output Measurements," Transactions of the ASME, Vol 121, pp 48-57 (1999). Peng, "Stable Neural Controller Design for Unknown Nonlinear Systems Using ping," Proceedings of the American Control Conf., pp 1067-1071 (June, 1999).
O mailed July 19, 2002. mational Search Report, PCT/US01/17201 (PCT application related to present on), ISA/EPO Authorized Officer: Mustafa Corapci, mailed July 18, 2002. Basar, "Disturbance Attenuating Adaptive Controllers for Parametric Strict Feedback r Systems with Output Measurements," Transactions of the ASME, Vol 121, pp 48-57 1999). Peng, "Stable Neural Controller Design for Unknown Nonlinear Systems Using ping," Proceedings of the American Control Conf., pp 1067-1071 (June, 1999).
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Complete if Known					
Application Number	09/865,659				
Filing Date	5/25/2001				
First Named Inventor	CALISE, Anthony J.				
Art Unit	2122 2/21				
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Attorney Docket Number	3304-34267				

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